United States Patent

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[54] **ACUTATOR FOR SLIDE FASTENER**
5 Claims, 1 Drawing Fig.

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[51] **Int. Cl.** **A44b 11/00,** A44b 19/26
[50] **Field of Search** ..... 24/127, 123.7, 115.10, 205.15; 16/115, 122, 125, 126, 127, 110; 294/1 A, 25, 26; 160/386; 46/201; 272/97, 99, 79, 80, 75, 67; 287/81

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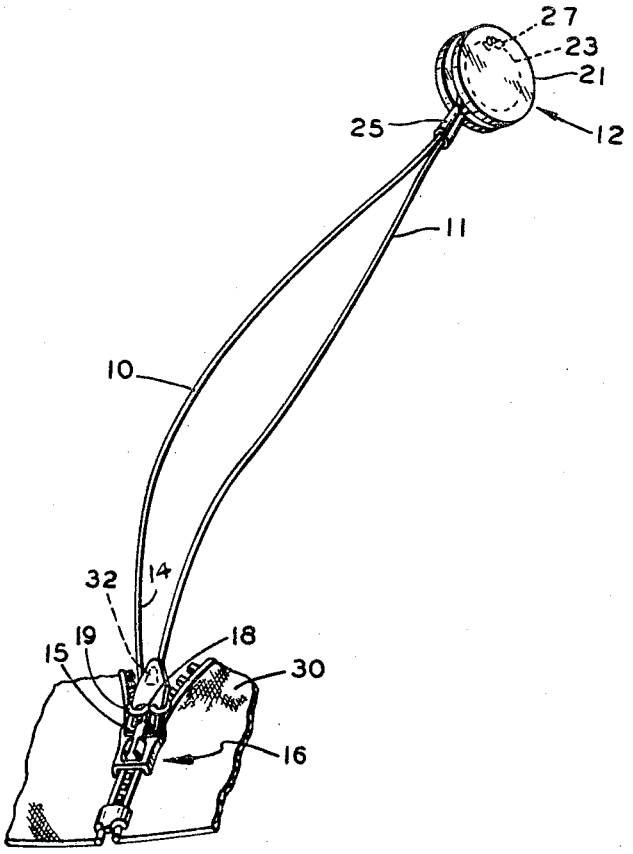
ABSTRACT: Means for moving a slider of a slide fastener for joining opposed edges of a body garment opening extending down the back of said garment between the waist and the neck, and including a flexible cord of elastic extensible material and provided at one end with means for detachably securing said cord to the slider, and a finger-engaging piece at the free end of the cable.



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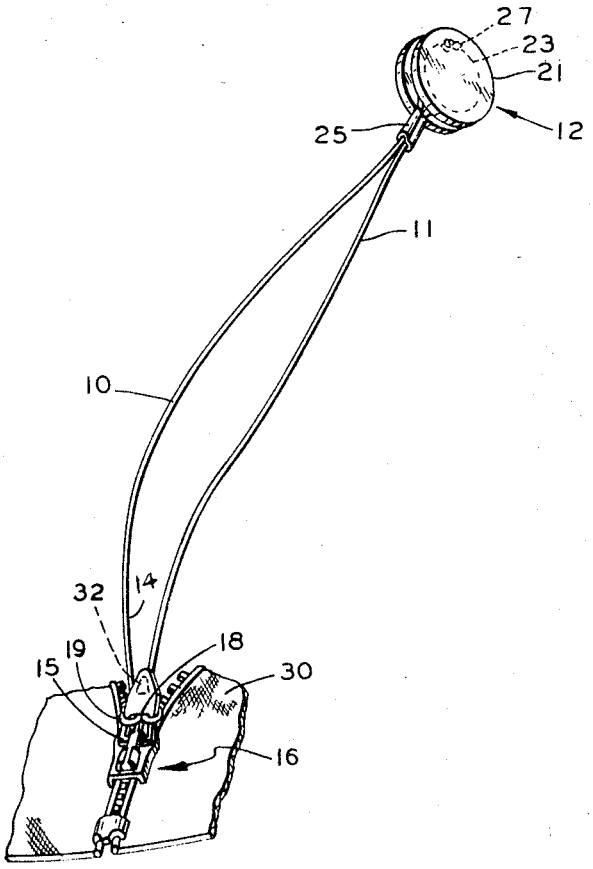

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ACUTATOR FOR SLIDE FASTENER

This invention relates to a device for actuating the slider of a slide fastener attached to the rear of a feminine body garment to enable the wearer to easily and conveniently operate the slider without the need for going through awkward contortions. Many body garments have a rear opening extending from the neck down to the waist, or thereabouts, and the margins of the opening are usually maintained in closed position by a slide fastener and the wearer invariably requires the assistance of another person to raise and lower the slider. Difficulty ensues when a lady finds herself devoid of assistance, especially moving the slider between the waist and the upper shoulder blades, up or down. Pull cords of various kinds have been devised to end this annoyance but these cords have been required to be so long, for convenient manipulation, as to render it necessary to detach the cord from the slider each time after use. This presents additional problems unrelated to movement of the slider, such as the likelihood of misplacing of the pull cord and the inconvenience of attaching and detaching it to the slider each time the garment is worn.

The principal object of the present invention is to provide a relatively short pull cord of about one-third the length of previous cords and, after raising the slider with the aid of the present device, it can be conveniently hidden from view by placing it inside the dress where it stays, without others being aware of it. When it is desired to remove the garment, the pull cord is readily retrieved from inside the dress.

In the drawing, the FIGURE shows a plan view of the slide fastener actuator of the present invention secured at its inner end to the slider.

The device of the present invention includes a cable or cord **10** formed preferably of flexible elastic material capable of stretching under tension to somewhat more than two times its normal length. For convenience in attaching the inner end of the cord to the slider fingerpiece or handle, it is preferably doubled and at its outer end **11** the two lengths are secured to a weight **12**. At its inner or doubled end **14**, the elastic cord is detachably secured to the pivoted handle **15** on the slider **16** of a separable fastener. These handles invariably have an opening shown at **18** and the doubled end is simply inserted through the opening, forming a closed loop **19**. The remaining doubled end is inserted through the loop and pulled to reduce the loop to its smallest dimension. Any other attaching means may, of course, be employed.

Any suitable flat member may be used on the combined pull handle and weighted end. One convenient arrangement is to use two coins like pennies shown at **21** which are adhered together by employing a small section of vinyl foam rubber **23** with pressure-sensitive adhesive on both its faces. This sheet material is commercially available and is used for a variety of purposes, such as securing a picture to a wall. By placing a piece of smaller dimensions than the coins between said coins and then pressing the coins together they become firmly secured and provide an annular channel. The doubled cords are secured together by a ferrule **25** and the terminals are simply knotted at **27** forming a loop of lesser diameter than the circumference of the coins so the cord is under tension within the annular groove between the coins.

To join the two edges **30** of the body garment by means of the slide fastener with its slider **16**, the wearer grasps the cable by means of the pull handle or weight **12** raises it over her head and draws it upwardly. To perform this manipulation without going through awkward contortions would require a cable length of more than double the length of the fastener. By employing a cable which is resiliently extensible, the shorter cable can be used and in view of its relatively short length, it is not necessary to detach the cable from the slider after manipulation to the closed position of the slider. The cable is simply inserted inside the dress and released. The weight draws the free end downwardly and the mass of the entire article is so small that its presence is not noticed by the wearer. To open the garment, the fingerpiece is easily retrieved.

It will be appreciated that the handles on these fastener sliders come in a large variety and in the one shown there is a second opening **32** which could be used to receive and secure the inner end of the cable instead of opening **18**. In other fasteners there is a hole through the body of the slide so that a filament of lesser cross section than the cable can pass through the hole rather than through the pivoted handle, forming a secondary loop through which the elastic cable is then inserted. This arrangement has a marked advantage since the handle can retain its normal, lowered position while the cable and its weight are located inside the dress.

What I claim is:

1. Actuator for opening and closing a slide fastener comprising;

an elastic pulling means for securement at one end of the slide including a loop at the other end thereof,

flat member holding means, including a pair of discs secured together forming a channel which receives said loop, and

fastening means for securing said loop to said holding means so that the slide fastener can be remotely activated by applying a force to said elastic pulling means.

2. An actuator as defined in claim **1**, wherein said fastening means additionally comprises;

at least one ferrule for securement of said holding means to said loop.

3. An actuator as defined in claim **1**, wherein

said plurality of thin discs are disposed concentrically in spaced-apart relation, and

adhesive means disposed between said discs in spaced-apart relation so as to provide said annular channel for receiving said loop.

4. An actuator as defined in claim **1**, wherein said elastic pulling means comprises two elastic cords of equal length acting in tandem for slide actuation.

5. An actuator as defined in claim **1**, wherein said pulling means comprises;

two elastic cords of equal length acting in tandem,

said plurality of thin discs being disposed concentrically in spaced-apart relation,

adhesive means disposed between said discs in spaced-apart relation forming said annular channel, and

said loop, and

at least one ferrule for securement of said elastic cords by said loop in said annular channel.